

## **REMARKS/ARGUMENTS**

The rejections presented in the Office Action dated June 4, 2007 (hereinafter Office Action) have been considered. Claims 1-48 and 80-100 remain pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 1, 80, and 100 have been amended. Support for the amendments to these claims can be found in dependent claim 35. Because estimating accuracy was already considered and searched with the pending claims, the Applicant respectfully submits that the current amendments do not necessitate a new search and do not add new matter.

Claims 1-9, 14-18, 20, 22-27, 30-34, 37, 39-45, 47, 48, 80-83, 85, 86, 88-96, 98, and 100 are rejected based on 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,126,611 to *Bourgeois et al.* (hereinafter “*Bourgeois*”).

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (*Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. The Applicant respectfully submits that *Bourgeois* does not teach each and every element of independent claims 1, 80, and 100, and therefore fails to anticipate these claims.

Each of the Applicant’s independent claims 1, 80, and 100 includes in some form predicting disordered breathing and delivering therapy to mitigate the predicted disordered breathing. The Applicant respectfully submits that *Bourgeois* concerns detecting presently occurring disordered breathing episodes, and does not teach predicting disordered breathing before the onset of disordered breathing.

*Bourgeois* discloses “means for detecting an apnea event and means responsive to detection of an apnea event for stimulating the heart.” (Col. 2, Lines 34-36). As cited on page 5 of the Office Action, *Bourgeois* states “the device is arranged to sense an apnea

event. In one embodiment a decrease in heart rate below a given threshold is taken as an indication of the onset of sleep apnea.” (Col. 3, Lines 51-54).

Onset is defined as “the beginning of something” (*The New Oxford American Dictionary*, Oxford University Press, 2001). Accordingly, *Bourgeois* discloses detecting apnea once it has begun, such that the detection is of a presently occurring apnea episode.

The Applicant respectfully submits that *Bourgeois*’ disclosure of detecting sleep apnea once a particular episode of apnea has begin does not teach predicting disordered breathing and delivering therapy to mitigate the predicted disordered breathing. The definition of the word “predict” is to “say or estimate that a specified thing will happen in the future.” (*The New Oxford American Dictionary*, Oxford University Press, 2001). As such, *Bourgeois*’ disclosure of detecting an episode of sleep apnea once it has already onset does not constitute predicting the occurrence of sleep apnea before it has begun.

Claims 1, 80, and 100 each recite some variation of predicting disordered breathing based on the one or more detected conditions; and delivering cardiac electrical stimulation therapy to mitigate the predicted disordered breathing, wherein at least one of detecting, predicting, and delivering is performed at least in part implantably, which is clearly not taught by *Bourgeois*.

Moreover, each of independent claims 1, 80, and 100 have been amended to recite some variation of estimating an accuracy of the disordered breathing prediction. Considering that *Bourgeois* fails to teach predicting disordered breathing, as discussed above, the Applicant respectfully submits that *Bourgeois* necessarily does not teach estimating an accuracy of the disordered breathing prediction.

For each of the reasons discussed above, the Applicant respectfully submits that *Bourgeois* does not teach each and every element and limitation of the Applicant’s independent claims 1, 80, and 100, and therefore cannot anticipate these claims.

Dependent claims 2-9, 14-18, 20, 22-27, 30-34, 37, 39-45, 47-48, 82, 83, 85, 86, 88-96, and 98, which are dependent from independent claims 1 and 80, respectively, were also rejected under 35 U.S.C. §102(b) as being unpatentable over *Bourgeois*. While the Applicant does not acquiesce to the particular rejections to these dependent claims, it is

believed that these rejections are now moot in view of the remarks made in connection with independent claims 1 and 80. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited reference. Therefore, dependent claims 2-9, 14-18, 20, 22-27, 30-34, 37, 39-45, 47-48, 82, 83, 85, 86, 88-96, and 98 are also not anticipated by *Bourgeois*.

For at least these reasons, the Applicant respectfully submits that the rejection of claims 1-9, 14-18, 20, 22-27, 30-34, 37, 39-45, 47, 48, 80-83, 85, 86, 88-96, 98, and 100 as being anticipated by *Bourgeois* is not sustainable, the withdrawal of which is respectfully requested.

Claims 19-21, 43, 44, 46, 84, and 99 are rejected based on 35 U.S.C. §103(a) as being unpatentable over *Bourgeois*. Claims 10-13 and 87 are rejected based on 35 U.S.C. §103(a) as being unpatentable over *Bourgeois* in view of U.S. Patent No. 6,398,728 to *Bardy* (hereinafter “*Bardy*”). Claim 97 is rejected based on 35 U.S.C. §103(a) as being unpatentable over *Bourgeois* in view of U.S. Patent No. 5,335,657 to *Terry, Jr. et al.* (hereinafter “*Terry, Jr.*”). Claims 35, 36, and 38 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Bourgeois* in view of U.S. Patent No. 6,366,813 to *DiLorenzo* (hereinafter “*DiLorenzo*”).

Each of claims 10-13, 19-21, 35, 36, 38, 43, 44, 46, 84, 87, 97, and 99 depend from one of independent claims 1 and 80 respectively. Independent claims 1 and 80 are not obvious for at least the reason that the cited references fail to teach or suggest each and every limitation recited in each claim. Furthermore, while the Applicant does not acquiesce to the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claims 1 and 80. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Moreover, if an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. (*In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Therefore, dependent claims 19-21, 43, 44, 46, 84, and 99 are not made

obvious by *Bourgeois*, dependent claims 10-13 and 87 are not made obvious by *Bourgeois* in view of *Bardy*, dependent claim 97 is not made obvious by *Bourgeois* in view of *Terry*, and dependent claims 35, 36 and 38 are not made obvious by *Bourgeois* in view of *DiLorenzo*.

As such, the Applicant respectfully requests withdrawal of the §103(a) rejection of claims 10-13, 19-21, 35, 36, 38, 43, 44, 46, 84, 87, 97, and 99 and notification that these claims are in condition for allowance.

Claims 1-48 and 80-100 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-97 of copending application no. 10/643,203. Claims 1-48 and 80-100 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-27 and 33-96 of copending application no. 10/642,998 in view of U.S. Patent No. 6,928,324 to *Park et al.* (hereinafter “*Park*”). Claims 1-48 and 80-100 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-102 of copending application no. 10/643,016 in view of *Park*.

The Applicant respectfully asserts that, in view of the amendments to the claims and arguments made above, the Examiner is compelled to withdraw the substantive art rejections of the claims. Once withdrawn, the only rejection remaining in the subject application is the provisional nonstatutory obviousness-type double patenting rejections. In view of MPEP § 804 I(B)(1), the Applicant respectfully submits that the provisional nonstatutory obviousness-type double patenting rejection should be withdrawn and that the subject application be permitted to issue as a patent.

It is to be understood that the Applicant does not acquiesce to the Examiner’s characterization of the asserted art or the Applicant’s claimed subject matter, nor of the Examiner’s application of the asserted art or combinations thereof to the Applicant’s claimed subject matter. Moreover, the Applicant does not acquiesce to any explicit or implicit statements or conclusions by the Examiner concerning what would have been obvious to one of ordinary skill in the art, obvious design choices, alternative equivalent arrangements, common knowledge at the time of the Applicant’s invention, officially

noticed facts, and the like. The Applicant respectfully submits that a detailed discussion of each of the Examiner's rejections beyond that provided above is not necessary, in view of the clear absence of teaching and suggestion of various features recited in the Applicant's pending claims. The Applicant, however, reserves the right to address in detail the Examiner's characterizations, conclusions, and rejections in the future.

Authorization is given to charge Deposit Account No. 50-3581 (GUID.103PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

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